

What is claimed is:

1. A stimulating light cut filter which is disposed between a radiation image convertor panel, which emits stimulated emission upon exposure to stimulating light beam, and a detecting means, which detects the stimulated emission emitted from the radiation image convertor panel, to transmit the stimulated emission and cut the stimulating light and comprises

an optical element which absorbs the stimulating light, and

a reflecting layer which reflects the stimulating light.

2. A stimulating light cut filter as defined in Claim 1 in which at least one reflecting layer is disposed in an optical path of the stimulated emission along which the stimulated emission propagates behind a face of the optical element upon which the stimulated emission impinges first in the optical elements of the stimulating light cut filter.

3. A stimulating light cut filter as defined in Claim 1 in which the transmissivity of the optical path of the stimulated emission between the position in which the stimulated emission first impinges upon the stimulating light cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%.

4. A stimulating light cut filter as defined in Claim 1 in which the stimulating light cut filter is provided with

a plurality of the reflecting layers, and the transmissivity between the position in which the stimulated emission first impinges upon the stimulating light cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%, and the transmissivities between adjacent reflecting layers are all 10% or less.

5 A stimulating light cut filter which is disposed between a radiation image convertor panel, which emits stimulated emission upon exposure to stimulating light beam, and a detecting means, which detects the stimulated emission emitted from the radiation image convertor panel, to transmit the stimulated emission and cut the stimulating light and comprises

15 a plurality of optical elements which absorb the stimulating light, and

at least one reflecting layer which reflects the stimulating light.

6. A stimulating light cut filter as defined in Claim 5 in which the plurality of optical elements are bonded together by way of the reflecting layer.

7. A stimulating light cut filter as defined in Claim 5 in which at least one reflecting layer is disposed in an optical path of the stimulated emission along which the stimulated emission propagates behind a face of the optical element upon which the stimulated emission impinges first in

the optical elements of the stimulating light cut filter.

8. A stimulating light cut filter as defined in Claim 5 in which the transmissivity of the optical path of the stimulated emission between the position in which the stimulated emission first impinges upon the stimulating light cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%.

9. A stimulating light cut filter as defined in Claim 5 in which the stimulating light cut filter is provided with a plurality of the reflecting layers, and the transmissivity between the position in which the stimulated emission first impinges upon the stimulating light cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%, and the transmissivities between adjacent reflecting layers are all 10% or less.

10. A radiation image read-out apparatus which is provided with a detecting means detecting stimulated emission emitted from a radiation image convertor panel upon exposure to a line-like stimulating light beam, and reads out a radiation image recorded on the radiation image convertor panel through an imaging optical system, wherein

a stimulating light cut filter comprising an optical element which absorbs the stimulating light and a reflecting layer which reflects the stimulating light is disposed between

the radiation image convertor panel and the detecting means to transmit the stimulated emission and cut the stimulating light.

11. A radiation image read-out apparatus as defined in  
5 Claim 10 in which at least one reflecting layer of the stimulating light cut filter is disposed in an optical path of the stimulated emission along which the stimulated emission propagates behind a face of the optical element upon which the stimulated emission impinges first in the optical elements of  
10 the stimulating light cut filter.

12. A radiation image read-out apparatus as defined in Claim 10 in which the transmissivity of the optical path of the stimulated emission between the position in which the stimulated emission first impinges upon the stimulating light  
15 cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%.

13. A radiation image read-out apparatus as defined in Claim 10 in which the stimulating light cut filter is provided  
20 with a plurality of the reflecting layers, and the transmissivity between the position in which the stimulated emission first impinges upon the stimulating light cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%, and  
25 the transmissivities between adjacent reflecting layers of the stimulating light cut filter are all 10% or less.

14. A radiation image read-out apparatus which is provided with a detecting means detecting stimulated emission emitted from a radiation image convertor panel upon exposure to a line-like stimulating light beam and reads out a radiation  
5 image recorded on the radiation image convertor panel through an imaging optical system, wherein

a stimulating light cut filter comprising a plurality of optical elements which absorb the stimulating light and at least one reflecting layer which reflects the stimulating  
10 light is disposed between the radiation image convertor panel and the detecting means to transmit the stimulated emission and cut the stimulating light.

15. A radiation image read-out apparatus as defined in Claim 14 in which the plurality of optical elements of the  
15 stimulating light cut filter are bonded together by way of the reflecting layer.

16. A radiation image read-out apparatus as defined in Claim 14 in which at least one reflecting layer of the  
20 stimulating light cut filter is disposed in an optical path of the stimulated emission along which the stimulated emission propagates behind a face of the optical element upon which the stimulated emission impinges first in the optical elements of the stimulating light cut filter.

17. A radiation image read-out apparatus as defined in  
25 Claim 14 in which the transmissivity of the optical path of the stimulated emission between the position in which the

stimulated emission first impinges upon the stimulating light cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%.

5           18. A radiation image read-out apparatus as defined in Claim 14 in which the stimulating light cut filter is provided with a plurality of the reflecting layers, and the transmissivity between the position in which the stimulated emission first impinges upon the stimulating light cut filter  
10 and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%, and the transmissivities between adjacent reflecting layers of the stimulating light cut filter are all 10% or less.

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